

# National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Permit Application

Phase II Municipal Separate Storm Sewer Systems (MS4s)

The purpose of this application is for local governments or special districts to apply for a National Pollutant Discharge Elimination System (NPDES) permit to discharge stormwater runoff from a Phase II municipal separate storm sewer system (MS4s). The Department of Ecology may request additional information and a notice of intent at a later date, upon development of a general permit.

MS4s seeking coverage must complete this application, based on existing information, and return it to the Department of Ecology **before March 10, 2003**. You may print this form and complete it by hand, or download it from our website at: <a href="https://www.ecy.wa.gov/programs/wq/stormwater/index.html">www.ecy.wa.gov/programs/wq/stormwater/index.html</a>

An authorized signature is needed to complete the application. All information should be included on this form. Supporting documents should be referenced in the text only. No attachments are necessary, other than those that may be required under the Map Requirements.

Mail completed application to:

Department of Ecology Water Quality Program PO Box 47600 Olympia, WA 98504-7600

Ecology will send you an acknowledgment of receipt. If you have questions about this application, please contact Lauren Driscoll at (360) 407-6467 or email her at <a href="ldri461@ecy.wa.gov">ldri461@ecy.wa.gov</a>.

#### Part I. General Information

1.	MS4 Operator	
	Name of city, county, special district, or other public entity: Street Address: City, State, Zip:	
	Ownership status: Federal State	Private Public Other Entity
2.	Local staff contact (person responsible for program imple	ementation and coordination):
	Name:	Phone:
	Title:	E-mail:
	<b>Does your MS4 presently have a web site?</b> (If yes, list addr If so, are your ordinances available on your website If not, where are your ordinances available?	Yes /   No   Yes /   No   No

Operator Type			
City County	Town Flood Control District	☐ Drainage District ☐ Other (list):	
<b>Description of Storm S</b>	ewer System		
. Area of land served b	y your MS4 (in square miles	):	
If city, town, or special	district give:	If county give:	
Area within current corp	porate boundaries	Area in square miles	
	· · · · · · · · · · · · · · · · · · ·		
Additional area of urban	i growini area (UCIA)	Area that is urbanized	
Additional area of urban Area that is urbanized (2 For all MS4s, give 2000). Storm Drainage Infra	2000 Census)  O Census population for area	Area that is urbanized  served Area located on Indian lands (if a	any) 
Area that is urbanized (2  For all MS4s, give 2000  S. Storm Drainage Infra  Please provide estimate	2000 Census)  O Census population for area structure:	served Area located on Indian lands (if a	
Area that is urbanized (2  For all MS4s, give 2000  S. Storm Drainage Infra  Please provide estimate	2000 Census)  O Census population for area astructure: es, using the most accurate in a owned or operated by the M	served Area located on Indian lands (if a	
Area that is urbanized (2 For all MS4s, give 2000  3. Storm Drainage Infra Please provide estimate infrastructure features	2000 Census)  O Census population for area structure: es, using the most accurate in a owned or operated by the Men:	served Area located on Indian lands (if a	torm drainage
Area that is urbanized (2 For all MS4s, give 2000 B. Storm Drainage Infra Please provide estimate infrastructure features Conveyance system	2000 Census)  O Census population for area structure: es, using the most accurate in cowned or operated by the Mem:  Detention	Area located on Indian lands (if a formation available at this time, for the following starts:  Flow Control system:	torm drainage
Area that is urbanized (2  For all MS4s, give 2000  B. Storm Drainage Infra  Please provide estimate infrastructure features  Conveyance system  Open ditches (miles or form)	2000 Census)  O Census population for area astructure: es, using the most accurate in a owned or operated by the Mem:  Detention Retention of the most accurate in a council or operated by the Mem:	Area located on Indian lands (if a nation available at this time, for the following states.  Flow Control system:  In facilities (estimate number operated by MS4)	
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- Include a map or maps that identifies:City, county, or district service area boundaries
  - State or Federal vocational/technical/college/university campuses and military institutions
  - Urban area (as defined by the 2000 Census)
  - GMA urban growth area (UGA), even if partially in an Urban Area
  - Municipal/county wastewater treatment plants, outfalls, uncontrolled sanitary landfills, vehicle fleet maintenance centers, power plants, airports, and other municipally owned or operated industrial activities
  - Arterial city or county roads, (additional roads if needed), drainage basins, and receiving waters

Please assure that information is clearly readable. Submit GIS maps if available, and only in .pdf format on a CD-ROM. Multiple maps must be of the same scale. 1:1000 or 1:2000 scales are recommended. Submit paper maps folded to  $8.5 \times 11.$ "

	Water Body Name (and New ID # if avail.)	Impaired?	Parameters	TMI
		☐ Yes / ☐ No		☐ Yes
		☐ Yes / ☐ No		Yes
		☐ Yes / ☐ No		Yes
		☐ Yes / ☐ No		Yes
		☐ Yes / ☐ No		Yes
		Yes / No		Yes
		Yes / No		Yes
		Yes / No		☐ Yes ☐
		Yes / No		Yes.
		Yes / No		Yes
				Yes
				☐ Yes
				☐ Yes
		Yes / No		Yes
Does vo	ur MS4 have public infil	tration facilities (inf	iltration basins or dry wells)?	☐ Yes / ☐
	_		iltration basins or dry wells)? t discharges to these facilities.	Yes /
If yes, es	stimate the percentage o	f the jurisdiction tha	•	Yes /
If yes, es	stimate the percentage o	f the jurisdiction tha	t discharges to these facilities.	
If yes, established Is your If yes, p	MS4 interconnected to a lease identify:	f the jurisdiction tha Washington State I	t discharges to these facilities.	Yes / □
If yes, es Is your I If yes, p	MS4 interconnected to a lease identify:	f the jurisdiction tha Washington State I	t discharges to these facilities.  Dept. of Transportation facility?  another jurisdiction? If yes, identify	Yes / □
If yes, es Is your If yes, p	MS4 interconnected to a lease identify:  MS4 interconnected, or	f the jurisdiction tha Washington State I	t discharges to these facilities.  Dept. of Transportation facility?  another jurisdiction? If yes, identify	Yes / □
If yes, estimated in the second secon	MS4 interconnected to a lease identify:  MS4 interconnected, or	f the jurisdiction tha Washington State I	t discharges to these facilities.  Dept. of Transportation facility?  another jurisdiction? If yes, identify	Yes / □
If yes, es Is your If yes, p	MS4 interconnected to a lease identify:  MS4 interconnected, or	f the jurisdiction tha Washington State I	t discharges to these facilities.  Dept. of Transportation facility?  another jurisdiction? If yes, identify	Yes / □
If yes, es Is your If yes, p	MS4 interconnected to a lease identify:  MS4 interconnected, or	f the jurisdiction tha Washington State I	t discharges to these facilities.  Dept. of Transportation facility?  another jurisdiction? If yes, identify	Yes / □

List all named receiving waters within your jurisdiction and ¼ mile downstream, and indicate those identified as impaired

pursuant to Clean Water Act Section 303(d), and those with an existing Total Maximum Daily Load (TMDL). This

6.

## Part II. Your Proposed Stormwater Management Program

This application requires you to identify Best Management Practices (BMPs) currently performed by your MS4, and provide information on your planned stormwater management program and proposed BMPs. The following six sections correspond to the six minimum control measures for a Phase II stormwater quality management program.

#### **Minimum Control Measures**

The National Pollutant Discharge Elimination System (NPDES) Phase II Rule defines a stormwater management program composed of six minimum control measures that, when implemented together, are expected to reduce pollutants discharged into receiving water bodies to the Maximum Extent Practicable (MEP). The six control measures include:

- 1. Public Education and Outreach on Stormwater Impacts
- 2. Public Involvement/Participation
- 3. Illicit Discharge Detection and Elimination
- 4. Construction Site Runoff Control
- 5. Post-Construction Stormwater Management in New Development and Redevelopment
- 6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each minimum control measure requires the selection and implementation of BMPs that comprehensively address the specific stormwater issues in your area.

The minimum requirements are provided in Appendix I as the minimum level necessary to comply with 40 CFR 122.34. Regulatory guidance from 40 CFR 122.34 is also provided for each minimum control measure.

Additional guidance on selecting BMPs and developing measurable goals can be found at the following EPA website: www.epa.gov/npdes/stormwater/measurablegoals/index.htm

#### **Instructions:**

For each minimum control measure, state your control objective and describe BMPs selected for implementation in your jurisdiction. For each BMP, include a brief description, measurable goal, and milestones as appropriate towards achieving that goal. Indicate if the BMP is part of an existing program, and if another entity will share responsibility for implementing the BMP.

In cases where another entity will perform one or more BMPs or components thereof on behalf of the permittee, specifically describe the activities each entity will conduct, and include reference to legal agreement where appropriate.

List as many BMPs as necessary to fulfill the requirements of 40 CFR 122.34 as referenced in Appendix I. If you have more than 2 BMPs for a control measure, copy/paste additional tables as necessary.

# 1. Public Education and Outreach on Storm Water Impacts

Does your MS4 pimpacts?	oresently perfori	n public education a	and outreach activities on stormwater	Yes / No
Minimum				
Measure				
Objective 1:				
BMP 1(a):	1			
Is this part of an program?	existing	Yes / No	Is another entity involved in BMP implementation?	Yes / No
Measurable Goal:				
Milestones:				
	_			
<b>BMP 1(b):</b>				
Is this part of an program?	existing	Yes / No	Is another entity involved in BMP implementation?	Yes / No
Measurable			imprementation.	
Goal:				
Milestones:				
2. Public Invo	olvement/Part	icipation		
Does your MS4 p	presently provide	e opportunity for the of a stormwater mar	e public to be involved or participate in the nagement program?	Yes / No
	•		<u> </u>	
Minimum				
Measure				
Objective 2:				
	1			
<b>BMP 2(a):</b>				
Is this part of an	existing	☐ Yes / ☐	Is another entity involved in BMP	☐ Yes / ☐
program?		No	implementation?	No
Measurable Goal:				
Milestones:				

<b>BMP 2(b):</b>				
Is this part of program?	of an existing	Yes / No	Is another entity involved in BMP implementation?	☐ Yes / ☐ No
Measurable Goal:				
Milestones:				
3. Illicit D	ischarge Detection	on and Eliminat	ion	
		program for the d	etection and elimination of illicit discharges	☐ Yes / ☐ No
			ce that enables you to prevent and eliminate	☐ Yes / ☐ No
3.4.				
Minimum Measure				
Objective 3:				
BMP 3(a):				
Is this part of program?	of an existing	Yes / No	Is another entity involved in BMP implementation?	Yes / No
Measurable Goal:				
Milestones:				
BMP 3(b):				
program?	of an existing	Yes / No	Is another entity involved in BMP implementation?	Yes / No
Measurable Goal:				
Milestones:				
		· · · · · · · · · · · · · · · · · · ·		

# 4. Construction Site Run-off Control

In the following spaces, indicate if your MS4 presently performs these activities related to construction site runoff control.					
Activities:					
Construction site plan review					
Responding to public input and complaints					
Enforcement and inspection procedures					
Training and educ	cation			Yes / No	
Does your MS4 p If yes, code numb		ordinance addressing	g construction site run-off control?	☐ Yes / ☐ No	
Minimum Measure Objective 4:					
BMP 4(a):					
Is this part of an program?	existing	Yes / No	Is another entity involved in BMP implementation?	Yes / No	
Measurable Goal:					
Milestones:					
 D) (D 4(1)					
BMP 4(b):					
Is this part of an program?	existing	Yes / No	Is another entity involved in BMP implementation?	☐ Yes / ☐ No	
Measurable Goal:			•		
Milestones:					

# 5. Post-Construction Stormwater Management in New Development and Redevelopment

	Please answer the following questions regarding post-construction stormwater management in new development and redevelopment.				
	Does your MS4 p	resently have a de	evelopment permit	process in place?	☐ Yes / ☐ No
	Does your MS4 p	resently have a st	ormwater managen	nent technical manual?	☐ Yes / ☐ No
	If yes, has the MS4 adopted the Ecology 2001 Stormwater manual, or an equivalent manual?  If no, what manual is currently adopted/used? Please list -				
	Does your MS4 presently have a plan review process for new development and redevelopment?				
	Does your MS4 p	resently inspect n	ew stormwater faci	llities?	☐ Yes / ☐ No
	Does your MS4 p	resently inspect e	xisting stormwater	facilities?	☐ Yes / ☐ No
	Does your MS4 parties of the second of the s		ormwater ordinance	e addressing post construction stormwater controls?	☐ Yes / ☐ No
			and/or provide ince	entives for Low Impact Development?	☐ Yes / ☐ No
	Minimum Measure Objective 5:				
	Objective 5.	<u> </u>			
	BMP 5(a):				
	Is this part of an program?	existing	Yes / No	Is another entity involved in BMP implementation?	Yes / No
	Measurable Goal:			-	·
	Milestones:				
	BMP 5(b):				
	Is this part of an program?	existing	☐ Yes / ☐ No	Is another entity involved in BMP implementation?	☐ Yes / ☐ No
	Measurable			-	
	Goal:				
	Milestones:				

# 6. Pollution Prevention/Good Housekeeping for Municipal Operations

Does your MS4 p housekeeping for			promote pollution prevention and go	ood	☐ Yes / ☐ No	
are not covered u	List municipally owned or operated facilities that would reasonably be expected to discharge contaminated runoff and are not covered under a NPDES permit: for example – vehicle maintenance garages, waste transfer operations, golf courses, salt or other materials storage, or open landfills. Also, indicate if there is a documented pollution prevention plan in place.					
Facility or type o	Facility or type of facilities/operation:					
					Yes / No	
					Yes / No	
					Yes / No	
					Yes / No	
Minimum Measure Objective 6:						
<b>BMP 6(a):</b>						
Is this part of an program?	existing	☐ Yes / ☐ No	Is another entity involved in BMP implementation?		Yes / No	
Measurable Goal:						
Milestones:						
BMP 6(b):						
Is this part of an program?	existing	Yes / No	Is another entity involved in BMP implementation?		Yes / No	
Measurable Goal:			•			
Milestones:						

# Part III. Recordkeeping and Reporting

The permittee will comply with recordkeeping and reporting requirements per 40 CFR 122.34(g)

## **Recordkeeping**—40 CFR 122.34(g)(2)

You must keep records required by the NPDES permit for at least three years. You must submit your records to the NPDES permitting authority only when specifically asked to do so. You must make your records, including a description of your stormwater management program, available to the public at reasonable times during regular business hours (see *122.7* for confidentiality provision). (You may assess a reasonable charge for copying. You may require a member of the public to provide advance notice.)

#### **Reporting**—40 CFR 122.34(g)(3)

Unless you are relying on another entity to satisfy your NPDES permit obligations under 122.35(a), you must submit annual reports in year two and four unless the NPDES permitting authority requires more frequent reports. Your report must include:

- (i) The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving your identified measurable goals for each of the minimum control measures:
- (ii) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
- (iii) A summary of the stormwater activities you plan to undertake during the next reporting cycle;
- (iv) A change in any identified best management practices or measurable goals for any of the minimum control measures; and
- (v) Notice that you are relying on another governmental entity to satisfy some of your permit obligations (if applicable).

#### Part IV. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative Name:		
Title:		
Signature:		
Date:		
	-	

### APPENDIX I.

# **Minimum Control Measure Requirements** (source: 40 CFR 122.34(b))

# 1. Public Education & Outreach on Stormwater Impacts

#### **Minimum Requirements** -40 CFR 122.34(b)(1)(i)

You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

## **Regulatory Guidance** -40 *CFR* 122.34(b)(1)(ii)

You may use stormwater educational materials provided by your state; tribe; EPA; environmental, public interest, or trade organizations; or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce stormwater pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil and household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities, as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling and watershed and beach cleanups. In addition, EPA recommends that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts. For example, providing information to restaurants on the impact of grease clogging storm drains, and to garages on the impact of oil discharges. You are encouraged to tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

### 2. Public Involvement/Participation

#### **Minimum Requirements** -40 CFR 122.34(b)(2)(i)

You must, at a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program.

#### **Regulatory Guidance** -40 CFR 122.34(b)(2)(ii)

EPA recommends that the public be included in developing, implementing, and reviewing your stormwater management program, and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local stormwater management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

## 3. Illicit Discharge Detection & Elimination

#### **Minimum Requirements** -40 CFR 122.34(b)(3)(i)

You must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.

#### (ii) You must:

- (A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
- (B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
- (C) Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to your system; and
- (D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
- (iii) You need address the following categories of non-stormwater discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

### **Regulatory Guidance** -40 CFR 122.34(b)(3)(iv)

EPA recommends that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling; a program to promote, publicize, and facilitate public reporting of illicit connections or discharges; and distribution of outreach materials.

#### 4. Construction Site Stormwater Runoff Control

# **Minimum Requirements** -40 CFR 122.34(b)(4)(i)

You must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for stormwater discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.

- (ii) Your program must include the development and implementation of, at a minimum:
  - (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
  - (B) Requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices;
  - (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
  - (D) Procedures for site plan review which incorporate consideration of potential water quality impacts;
  - (E) Procedures for receipt and consideration of information submitted by the public, and
  - (F) Procedures for site inspection and enforcement of control measures.

# Regulatory Guidance – 40 CFR 122.34(b)(4)(iii)

Examples of sanctions to ensure compliance include non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local (ESC) requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality. You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a stormwater pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See Sec. 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for stormwater discharges from construction sites). Also see Sec. 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf).

#### 5. Post-Construction Stormwater Management in New Development & Redevelopment

#### **Minimum Requirements** -40 CFR 122.34(b)(5)(i)

You must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.

#### (ii) You must:

- (A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
- (B) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law;
- (C) Ensure adequate long-term operation and maintenance of BMPs.

#### **Regulatory Guidance** – 40 CFR 122.34(b)(5)(iii)

If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen: be appropriate for the local community; minimize water quality impacts; and attempt to maintain predevelopment runoff conditions. In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens.

When developing a program that is consistent with this measure's intent, EPA recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures. In developing your program, you should consider assessing existing ordinances, policies, programs and studies that address stormwater runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program. Non-structural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extendeddetention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. EPA recommends that you ensure the appropriate implementation of the structural BMPs by considering some or all of the following: preconstruction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Stormwater technologies are constantly being improved, and EPA recommends that your requirements be responsive to these changes, developments or improvements in control technologies.

#### 6. Pollution Prevention/Good Housekeeping for Municipal Operations

#### **Minimum Requirements** -40 CFR 122.34(b)(6)(i)

You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your state, Tribe, or other organizations, your program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

## **Regulatory Guidance** -40 CFR 122.34(b)(6)(ii)

EPA recommends that, at a minimum, you consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and nonstructural stormwater controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all stormwater management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

### APPENDIX II.

#### **ABBREVIATIONS\*:**

**BAT** Best Available Technology Economically Achievable (applies to non-conventional and toxic pollutants)

**BCT** Best Conventional Pollutant Control Technology (applies to conventional pollutants)

**BMP** Best Management Practice

**BPJ** Best Professional Judgment

**BPT** Best Practicable Control Technology Currently Available (generally applies to conventional pollutants and some metals)

**CFR** Code of Federal Regulations

**CGP** Construction General Permit

**COD** Chemical Oxygen Demand

**CSO** Combined Sewer Overflow

**CWA** Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972)

**CZARA** Coastal Zone Act Reauthorization Amendments

**DO** Dissolved Oxygen

**DMR** Discharge Monitoring Report

**ELG** Effluent Limitations Guidelines

**EPA** Environmental Protection Agency

**FR** Federal Register

**MEP** Maximum Extent Practicable

**MS4** Municipal Separate Storm Sewer System

MSGP Multi Sector General Permit

**NOI** Notice of Intent

**NOT** Notice of Termination

**NOV** Notice of Violation

**NPDES** National Pollutant Discharge Elimination System

**NPS** Non-point Source

**O&M** Operation and Maintenance

OW Office of Water

**OWM** Office of Wastewater Management

**PA** Permitting Authority

**POTW** Publicly Owned Treatment Works

**SIC** Standard Industrial Classification

**SWPPP** Stormwater Pollution Prevention Plan

TMDL Total Maximum Daily Load

**TSS** Total Suspended Solids

**UA** Urbanized Area

#### **DEFINITIONS\*:**

**Authorized Representative:** For a municipality, State, Federal, or other public agency: (a) By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal Agency includes (i) the chief executive officer of the Agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the Agency (e.g., Regional Administrators of EPA).

(b) All reports required by permits, and or other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person.

**Best Available Treatment(BAT)/Best Control Technology (BCT)**: A level of technology based on the very best (state of the art) control and treatment measures that have been developed or are capable of being developed and that are economically achievable within the appropriate industrial category.

**Best Management Practices (BMPs):** Activities or structural improvements that help reduce the quantity and improve the quality of stormwater runoff. BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Category (xi) facilities: Specific facilities classified as light industry with equipment or materials exposed to stormwater.

**Clean Water Act (Water Quality Act):** (formerly the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972). Public law 92-500; 33 U.S.C. 1251 et seq.; legislation which provides statutory authority for the NPDES program. Also know as the Federal Water Pollution Control Act.

**Conveyance:** The process of water moving from one place to another.

**Detention Facility:** An above or below ground facility, such as a pond or tank, that temporarily stores stormwater runoff and subsequently releases it at a slower rate than it is collected by the drainage facility system. There is little or no infiltration of stored stormwater.

**Discharge:** The volume of water (and suspended sediment if surface water) that passes a given location within a given period of time.

**Erosion:** When land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road-building, and timber harvesting.

**Excavation:** The process of removing earth, stone, or other materials from land.

**General Permit:** A permit issued under the NPDES program to cover a certain class or category of stormwater discharges. These permits reduce the administrative burden of permitting stormwater discharges.

**Grading:** The cutting and/or filling of the land surface to a desired slope or elevation.

**Illicit Connection:** Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater and is not authorized by an NPDES permit, with some exceptions (e.g., discharges due to fire fighting activities).

**Interconnected:** See Physically Interconnected

**Industrial Activity:** Any activity which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant.

**Large Municipal Separate Storm Sewer System (MS4):** An MS4 located in an incorporated place or county with a population of 250,000 or more, as determined by

**Light Manufacturing Facilities:** Described under Category (xi) of the definition of "stormwater discharges associated with industrial activity" [CFR 122 26(b)(14)(i-ix and xi)]. Under the Phase I NPDES Stormwater Program, these facilities were eligible for exemption from stormwater permitting requirements if certain areas and activities were not exposed to stormwater. As a result of the Phase II Final Rule, these facilities must now certify to a condition of no exposure.

Low Impact Development: The integration of site ecological and environmental goal and requirements into all phases of urban planning and design from the individual residential lot level to the entire watershed. Hydrologic functions of storage, infiltration, and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro-scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other strategies include the preservation/protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodland and highly permeable soils.

**Maximum Extent Practicable (MEP):** A standard for water quality that applies to all MS4 operators regulated under the NPDES Stormwater Program. Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop and implement their programs.

Medium Municipal Separate Storm Sewer System (MS4): MS4 located in an incorporated place or county with a population of 100,000 or more but less than 250,000, as determined by the latest U.S. Census.

Municipal Separate Storm Sewer System (MS4): A publicly -owned conveyance or system of conveyances that discharges to waters of the U.S. and is designed or used for collecting or conveying stormwater, is not a combined sewer, and is not part of a publicly-owned treatment works (POTW).

**Multi-Sector General Permit (MSGP):** An NPDES permit that regulates stormwater discharges from eleven categories of industrial activities.

**New Development:** Land disturbing activities, including Class IV - general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

**No exposure:** All industrial materials or activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

**Non-authorized States:** any State that does not have the authority to regulate the NPDES Stormwater Program.

**Non-point Source (NPS) Pollutants:** Pollutants from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water.

**Notice of Intent (NOI):** An application to notify the permitting authority of a facility's intention to be covered by a general permit; exempts a facility from having to submit an individual or group application.

**NPDES:** "National Pollutant Discharge Elimination System" the name of the surface water quality program authorized by Congress as part of the 1987 Clean Water Act. This is EPA program to control the discharge of pollutants to waters of the United States (see 40 CFR 122.2).

**O&M Expenditures:** The operating and maintenance costs associated with the continual workings of a project.

**Outfall:** The point where wastewater or drainage discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water.

**Permitting Authority (PA):** The NPDES-authorized state agency or EPA regional office that administers the NPDES Stormwater Program. PAs issue permits, provide compliance assistance, and inspect and enforce the program.

**Physically interconnected MS4:** This means that one MS4 is connected to a second MS4 in such a way that it allows for direct discharges into the second system.

Point Source Pollutant: Pollutants from a single, identifiable source such as a factory or refinery.

**Pollutant Loading:** The total quantity of pollutants in stormwater runoff.

**Qualifying local program:** A local, State or Tribal municipal stormwater management program that imposes, at a minimum, the relevant requirements of one or more of the minimum control measures includes in 122.34(b).

**Redevelopment:** On a site that is already substantially developed (i.e., has more than 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

**Regional:** An action (here, for stormwater management purposes) that involves more than one discrete property.

**Regional Detention Facility:** A stormwater quantity control structure designed to correct the existing surface water runoff problems of a basin or subbasin. The area downstream has been previously identified as having existing or predicted significant and regional flooding and/or erosion problems. This term is also used when a detention facility is sited to detain stormwater runoff from a number of new developments or areas within a catchment

**Regulated MS4:** Any MS4 covered by the NPDES Stormwater Program (regulated small, medium, or large MS4s).

**Retention:** The process of collecting and holding surface and stormwater runoff with no surface outflow.

**Retention/detention facility (R/D):** A type of drainage facility designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration, and/or infiltration into the ground; or to hold surface and stormwater runoff for a sort period of time and then release it to the surface and stormwater management system.

**Retrofit:** The modification of stormwater management systems through the construction and/or enhancement of wet ponds, wetland plantings, or other BMPs designed to improve water quality

**Runoff:** Drainage or flood discharge that leaves an area as surface flow or as pipeline flow. Has reached a channel or pipeline by either surface or sub-surface routes.

**Sanitary Sewer:** A system of underground pipes that carries sanitary waste or process wastewater to a treatment plant.

**Sediment:** Soil, sand, and minerals washed from land into water, usually after rain. Sediment can destroy fishnesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

**Sheet flow:** The portion of precipitation that moves initially as overland flow in very shallow depths before eventually reaching a stream channel.

**Site Plan:** A graphical representation of a layout of buildings and facilities on a parcel of land.

**Site Runoff:** Any drainage or flood discharge that is released from a specified area.

**Small Municipal Separate Storm Sewer System (MS4):** Any MS4 that is not regulated under Phase I of the NIPDES Stormwater Program and Federally-owned MS4s.

**Stakeholder:** An entity that holds a special interest in an issue or program -- such as the stormwater program - since it is or may be affected by it.

**Standard Industrial Classification (SIC) Code:** A four digit number which is used to identify various types of industries.

Storm Drain: A slotted opening leading to an underground pipe or an open ditch for carrying surface runoff.

**Stormwater:** Precipitation that accumulates in natural and/or constructed storage and stormwater systems during and immediately following a storm event.

**Stormwater Management:** Functions associated with planning, designing, constructing, maintaining, financing, and regulating the facilities (both constructed and natural) that collect, store, control, and/or convey stormwater.

**Stormwater Pollution Prevention Plan (SWPPP):** A plan to describe a process whereby a facility thoroughly evaluates potential pollutant sources at a site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in stormwater runoff.

**Surface Water:** Water that remains on the surface of the ground, including rivers, lakes, reservoirs, streams, wetlands, impoundments, seas, estuaries, etc.

**Total Maximum Daily Load (TMDL):** The maximum amount of pollutants which can released into a water body without adversely affecting the water quality.

**Tool Box:** A term to describe the activities and materials that EPA plans to perform/produce to facilitate implementation of the stormwater program in an effective and cost-efficient manner. The eight components include: 1) fact sheets; 2) guidance documents; 3) menu of BMPs; 4) compliance assistance; 5) information clearing house; 6) training and outreach efforts; 7) technical research; and 8) support for demonstration projects.

**Treatment BMP:** A BMP that is intended to remove pollutants form stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration swales, and constructed wetlands.

**Uncontrolled Sanitary Landfill:** a landfill or open dump, whether in operation or closed, that does not meet the requirements for run-on or runoff controls established pursuant to subtitle D of the Solid Waste Disposal Act.

**Urbanized Area (UA):** A Bureau of the Census determination of a central place (or places) and the adjacent densely settled surrounding territory that together have a minimum residential population of 50,000 people and a minimum average density of 1,000 people/square mile. This is a simplified definition of a UA; the full definition is very complex.

**Urban Growth Areas** means those areas designated by a county pursuant to RCW 36.70A.110.

**Urban Runoff:** Stormwater from urban areas, which tends to contain heavy concentrations of pollutants from urban activities.

**Watershed:** That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

Wet Weather Flows: Water entering storm drains during rainstorms/wet weather events.

\*The following references were used in these sections:

- Stormwater Phase II Compliance Assistance Guide; United States Environmental Protection Agency, Office of Water; March 2000; Publication # EPA 833-R-00-002.
- 40 Code of Federal Regulations, part 122.22, (3); United States Environmental Protection Agency.
- Stormwater Management Manual for Western Washington; Washington State Department of Ecology; August 2001; Publication # 99-11 through 99-13.
- Low Impact Development in Puget Sound; Innovative Stormwater Management Practices, a conference sponsored by the Puget Sound Water Quality Action Team and King County Department of Natural Resources through a Water Works Grant.
- Low Impact Development Design Strategies, An Integrated Design Approach; Prince Georges County, Maryland, Department of Environmental Resources; June 1999.